



Promoting a better understanding of  
Harmful Algal Blooms by way of  
Volunteer Monitoring

# Southeast Phytoplankton Monitoring Network

Partnering With:



## Clean Equipment:

- **ALWAYS** clean your equipment (both the plankton net and the refractometer) by washing with **FRESH WATER** to avoid contamination of the sample as well as salt water damage to your equipment!

## Preserving a Sample:

- Here is what you need to be able to preserve any interesting plankton samples you may have for future classes:

### **Lugol's Solution**

225mL distilled water  
25g KI (potassium iodide)  
0.5g I<sub>2</sub> (iodine)  
25mL glacial acetic acid

**Directions:** Dissolve in 225mL of distilled water 25g KI (potassium iodide), then 0.5g I<sub>2</sub> (iodine), and finally add 25mL glacial acetic acid.

- Add about 0.5mL of Lugol's solution to a 25mL sample for preservation

You may have to occasionally add additional Lugol's solution over time to maintain the stain on your phytoplankton. The goal is to stain your sample with Lugol's solution so that it is tea-colored.

*Note: If you are in a lab you can use Gluderaldehyde.*

## Equipment Purchase:

- Plankton Net
  - Sea-Gear Corporation, 700-B1 South John Rhodes Blvd., Melbourne, FL 32904; Phone: 321-728-9116; Fax: 321-722-0351
  - Web Site: [www.seagear.net](http://www.seagear.net)
  - Student Plankton Net, 20cm diameter. 3:1 #20 micron mesh, with cod end collar, hose clamp and 1 each 4 and 8 oz. cod end jar
- Extra bottles
  - Fisher Scientific, Inc., Phone: 1-800-955-1177
  - Web Site: <https://www1.fishersci.com/education/index.jsp>
  - Fisherbrand HDPE round bottles, 38mm screw cap, 4oz capacity
- Salt Refractometer
  - Forestry Suppliers, Inc., 205 West Rankin Street, P.O. Box 8397, Jackson, MS 39284-8397; Phone: 1-800-647-5368; Fax: 800-813-2704
  - Web Site: <http://www.forestry-suppliers.com/>
- Thermometers
  - Forestry Suppliers, Inc., 205 West Rankin Street, P.O. Box 8397, Jackson, MS 39284-8397; Phone: 1-800-647-5368; Fax: 800-813-2704
  - Web Site: <http://www.forestry-suppliers.com/>
  - Armored Thermometers, (non-mercury filled), -30 to 50 degrees Celsius
- Digital Microscope
  - Great for taking pictures and videos of plankton. Need a computer to run the microscope; can project images onto LCD projector.
  - Web Site: <http://www.mic-d.com/>
  - Olympus MIC-D (This item has been discontinued)